A NEW SPECIES OF *SERIDENTUS* OSBORN, 1904 AND A KEY TO THE SPECIES (HETEROPTERA: REDUVIIDAE: STENOPODAINAE)

J. MALDONADO CAPRILES

Department of Crop Protection, College of Agricultural Sciences, University of Pucrto Rico, Mayagüez, Puerto Rico 00681; mailing address: Urb. Aponte 6 I 1, Cayey, Puerto Rico 00736.

Abstract.—Seridentus amarginatus n. sp., Stenopodainae, is described from Suriname. A couplet to separate Seridentus from Ctenotrachelus and a key to the species in the first genus are given.

Key Words: Reduviidae, Stenopodainae, Seridentus amarginatus n. sp., Suriname, key

Introduction

Barber (1930) studied a paratype of Seridentus denticulatus Osborn and described S. consimilis. Because in couplet 10 he described the pronotum as "never twice as long as head, most often but little longer," he ran Seridentus to couplet 18 of his generic key to the New World Stenopodainae. The pronotum is nearly twice as long as the head, so it runs to couplet 11 together with Ctenotrachelus. In couplet 14, to run to couplet 18, Barber says "Head, pronotum, and legs devoid of granules. . . ." The bases of the relatively abundant s-spines, which he did not mention, certainly give the body of Seridentus species a granulose appearance.

Setigerous spines are very common among the stenopodaines. In the text the name is shortened to "s-spines." These consist of a base and an apical seta. The base can be short or relatively long, truncate conical or hemispherical, and the seta short or long in relation to the base.

The holotype of *S. denticulatus* is deposited in the collection of The Ohio State University and is illustrated below. The type of the new species herein described is deposited in the National Museum of Natural

History (NMNH) in Washington, D.C. Measurements are in mm.

DISCUSSION

On the basis of the present study Achillas Torre Bueno, Ctenotrachelus and Seridentus should run to couplet 11 in Barber's key. Achillas has the apical angles of connexival segments spinous, foliaceous. The last two have the apex of the connexival segments entire or slightly produced. Seridentus and Ctenotrachelus can be separated by the couplet given below (to be inserted between couplets 11 and 12); it amounts to redescriptions of these two genera because the characters used were unmentioned by Osborn and only in some used by Barber.

Characters to Separate Ctenotrachelus from Seridentus

11a. Head relatively broad and short, anteocular space as long or slightly shorter than postocular space; eyes globular, relatively large, well surpassing lower margin of head; antennophore with a lateral compound spine; two lines of s-spines on ventral side of head slightly surpassing the anterior and posterior margins of eyes, spines about half as long as posteroventral s-spines behind eyes; scutellar spine angularly raised or vertical, metascutellar spine semivertical, cylindrical, separated from the scutellum; armature of lower surface of profemora consisting of scattered s-spines; profemur moderately incrassate; apical angles of last tergum of females slightly foliate; spongy fossa small, on surface of truncate apex; anterior legs with third tarsal segment twice as long as first two together.

...... Seridentus Osborn Head relatively elongate, anteocular space twice as long as postocular space; eyes hemispherical, smaller, level with lower margin of head; antennophore without a lateral spine; s-spines on ventral side of head much smaller than the ventrolateral behind eyes, a small number of spines grouped behind buccula and another similar group at basal end of gula, before collum; scutellar spine horizontal, metascutellar spine small, a mere point visible above level of resting fore wings, close to scutellar apex; armature of profemora consisting of quite short, abundant spines gradually shortening in length from base to apical end; profemur slightly incrassate; apical angles of last tergum sharp; spongy fossa about 1/4 length of segment, marginal; anterior legs with third tarsal segment slightly longer than first two together Ctenotrachelus Stål

The species in *Seridentus* are more densely granulose that those in *Ctenotrachelus*. *Seridentus amarginatus* sp. nov. and *S. denticulatus* have two rows of s-spines on the lower surface of the head, between the eyes, a useful character not mentioned before. The male genital capsule of *S. amarginatus* has two projections or apodemes on the margin of the inner surface (Figs. 12, 13) for holding in place but allowing movement of the parameres. This character is not present in *S. denticulatus*. It may have passed unnoticed until now among all reduviid genera.

KEY TO THE SPECIES IN SERIDENTUS

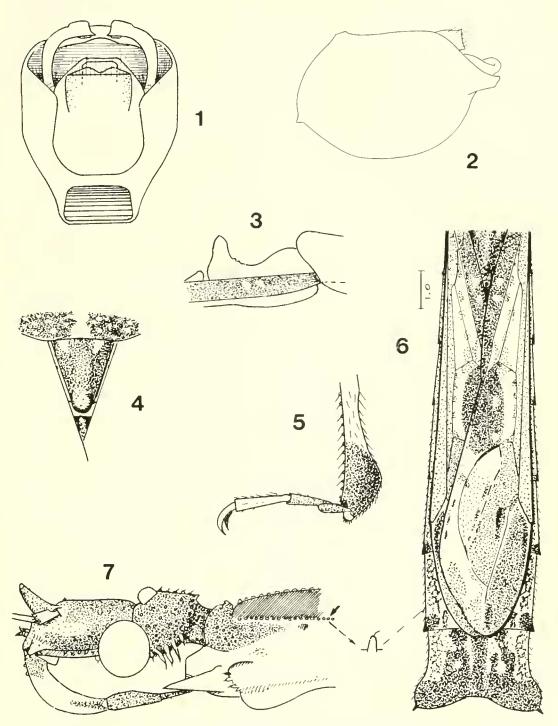
1. Head, pronotum and hemelytra blackish; s-spines ventrolaterally behind eyes short, slightly longer than thickness of first antennal segment; pronotal lateral margins with s-spines; length slightly less than 17.5 mm; Brasil

Head, pronotum and hemelytra dark fuscous or stramineous; spines behind eyes longer, almost twice as long as described above; pronotal

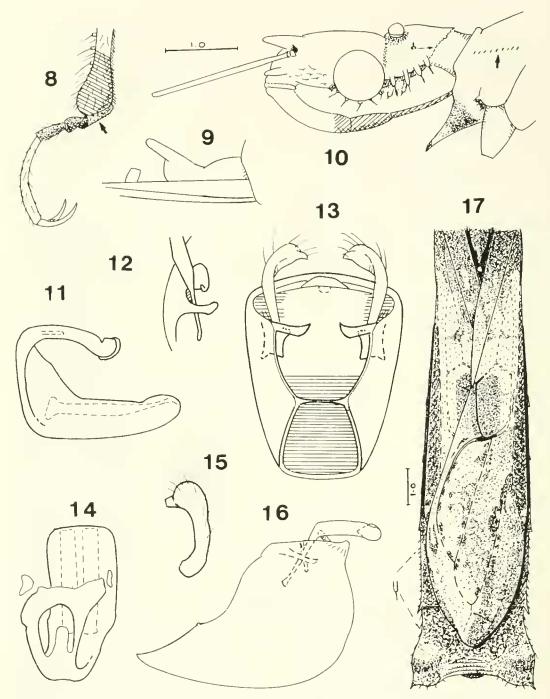
| | lateral margins with or without s-spines; length |
|----|--|
| | 19.0 mm or more |
| 2. | Lateral margins of pronotum without s-spines; |
| | head and pronotum stramineous or mostly |
| | stramineous 3 |
| | Lateral margins of pronotum with a row of |
| | s-spines; head and pronotum fuscous, dark 4 |
| 3. | Pronotum less than twice as long as head (4.69: |
| | 2.50); head and lobes of pronotum stramineous |
| | or grayish, unmarked with fuscous; anterior |
| | coxae and trochanters stramineous, unmarked; |
| | 6 pairs of s-spines ventrally between eyes and |
| | 4 ventrolaterally behind eyes; apical angles of |
| | last three connexival segments only short |
| | spined; length 19.8; Suriname |
| | S. amarginatus Maldonado, n. sp. |
| | Pronotum slightly over twice as long as head, |
| | stramineous, fuscous on either side of narrow, |
| | median line; anterior coxa, trochanter below, |
| | and base of femora fuscous; 3 postocular |
| | s-spines; apical angles of all connexival seg- |
| | ments with black, acute, nearly erect black spine; |
| | length 20.0; Cayenne |
| 4. | |
| | rium, and membrane profusely spotted with |
| | brown; length 19.00; Guyana |
| | |
| | Jugae and scutellar spine almost erect; clavus, |
| | corium, and membrane sparsely spotted with |
| | brown; length 21.00; Guyana |
| | S. denticulatus Osborn |
| | |

Seridentus amarginatus Maldonado sp. nov. Figs. 8–16

Male. - Overall color brownish. Hemelytra with conspicuous whitish-yellow areas, legs stramineous. Head stramineous, ocellar area and ocelli brownish; antennae stramineous, I segment with an apical brown band, II biannulate; others missing. Rostrum—segment I with basal 1/4 stramineous, apical 3/4 of I, and II and III very dark gray. Collum gray. Pronotum—anterior lobe above and laterally gray, glabrous dorsal areas dark gray or very pale brown; lateral margin of prosternum with black s-spines; ventral anterior angle black, projected into a long, mostly black spine; posterior lobe above and laterally pale stramineous; from humeral angle to lateral angles of scutellum mostly pale.



Figs. 1–7. Seridentus denticulatus Osborn, male holotype. 1, genital capsule, dorsal view, 2, genital capsule, lateral view. 3, scutellum and metascutellum, lateral view. 4, scutellum, dorsal view. 5, apex of protibia and tarsus, lateral view. 6, abdomen and hemelytra, dorsal view. 7, head and part of pronotum, lateral view.



Figs. 8–17. Seridentus amarginatus sp. nov., male holotype. 8, apex of protibia and tarsus, lateral view (arrow; spongy fossa). 9, scutellum and metascutellum, lateral view. 10, head and part of pronotum, lateral view (arrow; faint lateral margin). 11, aedeagus, lateral view. 12, detail of inner upper margin of genital capsule. 13, genital capsule, dorsal view. 14, aedeagus, dorsolateral view. 15, paramere, dorsal view. 16, genital capsule, lateral view. 17, abdomen and hemelytra, dorsal view.

Fore legs (Fig. 8) mostly stramineous; eoxa and trochanter dark gray, same shade as rostrum; base and slanted short band at midlength of femur and apical band of left tibia dark gray, of right tibia pale brown; middle and hind legs stramineous, coxae striped with brown, ventral surface of trochanters brown; femora with ventral black preapical spot; apex of tarsi brown. Scutellum (Fig. 9) dark gray, apex dark brown; meso- and metascutum blackish brown. Hemelytrabase color pale brown, area between apex of scutellum to discal hexagonal cell whitish-yellow, outer marginal area of membrane brownish and spotted with yellow, inner marginal area vellowish white. Mesoand metapleurae gray above, blackish brown; gray areas and area above acetabulum with very short, black based, vertical microsetae. Prosternum gray, glabrous; with a marginal row of s-spines; meso- and metasternum dark gray, both covered with short, silvery, decumbent microsetae. Abdomen-first visible sternum brown, with a few vellowish areas; second to basal half of penultimate stramineous, reticulate with brown; last sternum mostly brown; last tergum stramineous, profusely ornamented with brown.

Head (Fig. 10)—length 2.50; anteocular space 0.56, postocular space 0.50; width of interocular space at narrowest point 0.75; width of eye 0.53, length of eye 0.68, surpassing by 1/3 its diameter the lower surface of the head; from interocular sulcus to apex of head 1.37; width behind eyes 1.75, width in front of eyes 0.87; gena produced but not surpassing apex of head; 4 s-spines on gena; ventrolaterally behind eyes with 5 long s-spines, continuing as a row of small globular s-spines along the posterior margin of head; 5 pairs of s-spines below eyes; tylus reaching basal 1/10 of first antennal segment; collum 0.37. Antennal segments: I, 1.87; II, 3.56, moderately pilose, setae slightly longer than diameter of segment; III and 1V segments missing.

Pronotum-length 4.69: anterior lobe-

length 2.62, width across anterior angles 1.09, width across transverse sulcus 2.06, anterior angles rounded, lateral margins unarmed and rounded; suleus along posterior half, beginning and ending with a short elongate depression; anterior margin of acetabulum with 3 or 4 s-spines; posterior lobe—length 2.06, width at humeral angles 2.75, posterior margin slightly concave above scutellum: surface of anterior half of anterior lobe very finely granulose, posterior half with a pattern of glabrose tracts between rows of granulose areas. Prosternum concave longitudinally, margined with a conspicuous row of blackish s-spines with elongate bases and short setae. Scutellum basal width 1.00, length to base of apical spine 0.87, to apex of apical spine 1.56, apical spine raised at about 45°, metascutum with a vertical blunt spine. Fore leg-coxa length 0.87, slightly thicker basally than apieally, 0.50:0.43; trochanter length 0.81, with some blunt, short, ventral spines; femur pilose, incrassate, length 4.56, greatest width 0.87, suboval in cross section, dorsal surface with a row of blunt and s-spines on both sides of a glabrous stripe, anterior and posterior surfaces with scarce, short, decumbent pilosity; ventral armature—along anterior margin consisting of a row of short s-spines, every 3 or 5 spines a shorter, similar spine; posterior margin consisting of a row of well spaced, short, s-spines with almost globular bases; tibia - straight, slightly swollen apically; spongy fossa apical, half as long as first tarsal segment (0.70:0.14); vertical and decumbent, fine, pilose, pilosity shorter than diameter of segment, one or two longer black s-spines on black annulus; tarsi-I, 0.28; II, 0.37; III, 1.00, eurved; claws eurved, thickened basally. Middle and hind legs—middle coxae about $3 \times$ from first than from third (4.37:1.50); lengths 3.31, 5.62; both tibiae slightly thickened apically (0.43); middle and hind femora and tibiae 4.00, 6.25 and 3.75, 6.00 respectively; middle eoxae and trochanters unarmed. Abdomen (Fig. 17) with straight

margins, slightly widening to apex of last tergum. First connexival segments with unarmed apical angles, last three short spined; last tergum with a lateral, globular elevation before apical angle; greatest width across last tergum, 3.25 mm. Total body length 19.8 mm. Genitalia as in Figs. 11–16.

Holotype—male, SURINAME, Broto Naidi, 19-xii-1976; G. F. Meese collector. In NMNH.

The trivial name *amarginatus* refers to the lack of a well-defined lateral pronotal margin. This is defined in the other species and with a row of s-spines in 2 of the species as detailed in key.

Seridentus consimilis Barber

Seridentus consimilis Barber 1930, X: 208. Cayenne, one male.

The spined connexival segments, the three s-spines posteroventrally behind eyes, pronotum slightly over twice as long as head, and the very long prosternal spine identify this species.

Seridentus denticulatus Osborn Figs. 1–5

Seridentus denticulatus Osborn 1904, 5: 203. One male and one paratype. Guyana.

Length 19.0; greatest width of prothorax 2.3. pronotum and lateral margins with conspicuous fuscous s-spines, width of last abdominal segment 2.3 mm. One specimen from Suriname in my collection compared with the types. This species is very close to *S. maculosus*.

Seridentus havilandi Costa Lima & Campos Seabra

Seridentus havilandi Costa Lima & Campos Seabra 1945, 43: 156. Brazil, one male.

Its authors say that this species could be synonym of *S. maculosus*. The published short, insufficient descriptions of both species are not adequate to evaluate their status without studying types.

Seridentus maculosus (Haviland)

Gnathobleda maculosa Haviland, 1931: 136, 140. Kartabo, two males.

Seridentus maculosus: Wygodzinsky, 1949: 69.

Haviland's drawing 46d shows a pale head and pronotum but in the text (p. 140) he says "pitchy-brown." In the same drawing the foliate apical angles of the last tergum clearly indicate that this species belongs in *Seridentus*.

ACKNOWLEDGMENTS

Dr. Norman F. Johnson (Department of Entomology, Ohio State University) kindly lent Osborn's types of *Seridentus denticulatus*.

LITERATURE CITED

Barber, H. G. 1929–1930. Essay on the subfamily Stenopodinae of the New World. Entomologica Americana X (n. s.) (3): 149–192 (1929); X(4): 193–238 (1930).

Costa Lima, A. da and C. A. Campos Seabra. 1945. Stenopodineos da coleção do Instituto Oswaldo Cruz. 3a nota. Memorias Instituto Oswaldo Cruz 43: 153–159.

Haviland, M. D. 1931. The Reduviidae of Kartabo, Bartica District, British Guiana. Zoologica 7(5): 129–154.

Osborn, H. 1904. Notes on South American Hemiptera-Heteroptera. Ohio Naturalist 5: 195–204.

Wygodzinsky, P. 1949. Elenco sistemático de los reduviiformes americanos. Instituto Medicina Regional Tucuman. Monografia 1: 1–102.